

CD80 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3050a

Specification

CD80 Antibody (internal region) - Product Information

Application WB, E
Primary Accession P33681

Other Accession <u>NP_005182.1</u>, <u>941</u>

Reactivity
Host
Clonality
Concentration

Human
Goat
Polyclonal
O.5 mg/ml

Isotype IgG
Calculated MW 33048

CD80 Antibody (internal region) - Additional Information

Gene ID 941

Other Names

T-lymphocyte activation antigen CD80, Activation B7-1 antigen, BB1, CTLA-4 counter-receptor B7.1, B7, CD80, CD80, CD28LG, CD28LG1, LAB7

Dilution

WB~~1:1000

 $E \sim N/A$

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD80 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

CD80 Antibody (internal region) - Protein Information

Name CD80

Synonyms CD28LG1, CD28LG1, LAB7

Function

Costimulatory molecule that belongs to the immunoglobulin superfamily that plays an important



role in T-lymphocyte activation (PubMed:38467718). Acts as the primary auxiliary signal augmenting the MHC/TCR signal in naive T-cells together with the CD28 receptor which is constitutively expressed on the cell surface of T-cells (PubMed:12196291). In turn, activates different signaling pathways such as NF-kappa-B or MAPK leading to the production of different cytokines (PubMed:10438913). In addition, CD28/CD80 costimulatory signal stimulates glucose metabolism and ATP synthesis of T-cells by activating the PI3K/Akt signaling pathway (PubMed:12121659). Also acts as a regulator of PDL1/PDCD1 interactions to limit excess engagement of PDL1 and its inhibitory role in immune responses (PubMed:36727298). Expressed on B-cells, plays a critical role in regulating interactions between B-cells and T-cells in both early and late germinal center responses, which are crucial for the generation of effective humoral immune responses (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Expressed on activated B-cells, macrophages and dendritic cells

CD80 Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD80 Antibody (internal region) - Images







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AF3050a (1 μg/ml) staining of Lymph Node lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

CD80 Antibody (internal region) - References

T cell-encoded CD80 and 4-1BBL induce auto- and transcostimulation, resulting in potent tumor rejection. Stephan MT, Ponomarev V, Brentjens RJ, Chang AH, Dobrenkov KV, Heller G, Sadelain M, Nature medicine 2007 Dec 13 (12): 1440-9. PMID: 18026115